

ABSTRACT

5 This invention discloses an optical collimator that includes a built-in tap-out projection optical arrangement for projecting a portion of an incoming beam to a tap-out beam-transmission fiber. In one of the preferred embodiments, the built-in tap-out projection optical arrangement further includes a front surface having an incline angle for projecting a portion of an incoming beam to a tap-out beam transmission fiber. In another preferred embodiment, the built-in tap-out projection  
10 optical arrangement further includes a prism having a pair of inclined front surfaces for projecting the incoming beam into an output beam and a tap out beam. In yet another preferred embodiment, the built-in tap-out projection optical arrangement further includes a partially reflective front surface and a reflective mirror projecting the incoming beam into an  
15 output beam and a tap out beam. This invention disclosure a dual beam collimator that provides two parallel each other beam with adjustable distance between them in the same diameter as single beam collimator. The dual beam collimator can be expanded into multiple beam collimator also.

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